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Living with the aftermaths of a stroke in the era of the COVID-19 pandemic; the significance of home and close surroundings☆

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ABSTRACT

Stay-at-home recommendations to reduce the spread of the COVID-19 virus have had a major impact on people's everyday lives. However, while the evidence indicates that such recommendations have caused distress, anxiety, and fear among the public, little is known about how persons living with complex health conditions, e.g., disability after stroke, have experienced and handled the situation. We interviewed fourteen participants (7 women, 7 men) aged 61–91 years living in ordinary housing during summer 2020 to explore how people who recovered after a stroke experienced their everyday lives in their homes and close surroundings during the COVID-19 pandemic recommendations. Three intertwined themes were constructed from the narrative data and the iterative thematic analysis: (1) Places within and out of reach, (2) Upholding activities–strategies and structures, and (3) Adapting to new circumstances. The findings suggest that places within reach were important to maintain activities and provide structure in daily life. The participants seemed to make use of their previous experiences of adjusting to new circumstances after stroke when adapting to living under the stay-at-home recommendations. In addition, feeling that they now shared the restrictions with all other people in society seemed to ease their situations. Access to nature and spaces in the close surroundings was essential for staying socially connected and receiving support in daily life. The significance of the home and the neighbourhood for health experiences among people who recently have had a stroke should inform rehabilitation interventions both during and after pandemics and environmental planning.

1. Introduction

The rapid spread of the COVID-19 pandemic has had a major impact on people's usual way of life. In response to the outbreak, most countries imposed stay-at-home recommendations to reduce the spread of the virus, and high rates of loneliness in the general population have been reported (Killgore et al., 2020; World Health Organization, 2020).

However, while the evidence indicates that the COVID-19 outbreak has caused distress, anxiety, and fear among the public (Mukhtar, 2020), knowledge regarding how persons living with complex health conditions, such as after a stroke, experienced and coped with the situation is limited (Palmer et al., 2020).

Stroke is the most common brain injury and affects many persons annually worldwide, leading to inactivity and disability in adults (Virani et al., 2020). After a stroke, people often have long-term rehabilitation needs, and several providers are involved in the care trajectory to support the recovery process. The effects of a stroke can be profound and lead to long-lasting activity limitations, participation restrictions, a reduced quality of life and social isolation (Clarke and Black, 2005; Norlander et al., 2021; Northcott et al., 2016; Salter et al., 2008; Singam et al., 2015). Returning home from the hospital is often experienced as a struggle to adjust to a new self and an uncertain situation (Connolly and Mahoney, 2018; Wottrich et al., 2012). A review of qualitative stroke studies showed that not only impaired functions but also commitment, autonomy, insecurity, hope, and social relationships were focuses after a stroke (Lou et al., 2017). While few studies explored how people who recover after a stroke experience their everyday lives at home under the COVID-19 pandemic, studies have focused on other populations and

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housing settings. For example, Lebrasseur et al. (2021) conducted a review to explore the impact of the COVID-19 pandemic on people with disabilities. Such individuals already constitute a vulnerable population, and the findings demonstrate a reduction in physical activity, more difficulties in daily life, and changes in social life and lifestyle habits. However, there is a positive effect of being dependent on the familiar home environment with respect to health outcomes. For example, persons with Parkinson's disease have reported significantly better health-related quality of life during the pandemic than before, which was partially explained by reduced social contacts that may be difficult for this group (Tong et al., 2007). Considering the older population in general, the physical distance measures have increased loneliness among older adults (Seifert and Hassler, 2020), with worse consequences among those living in long-term care facilities (Huber and Seifert, 2022; Lood et al., 2021).

During the pandemic, medical priorities shifted to saving lives and scaling up intensive care unit resources, and it is likely that rehabilitation after a stroke has been altered to some extent (Bersano et al., 2020). Hence, to reduce the rapid spread of the virus and protect staff and people belonging to a high risk group, rehabilitation at home was heavily reduced (Held et al., 2022). This causes concerns because rehabilitation after a stroke is important for restoring persons' functioning and should begin as soon as possible after a stroke (Bernhardt et al., 2009) and preferably continue in the patient's home environment after hospital discharge (Langhorne et al., 2017). Such a care trajectory has been shown to result in increased patient satisfaction with rehabilitation, less need for assistance with activities in daily life, and less depression.

Researchers have noted the need to use an environmental lens to understand how persons react to, act in, and use their environments during new situations (Leontowitsch et al., 2021). Thus, spending more time indoors and in one's immediate surroundings as a response to the COVID-19 pandemic recommendations is likely to increase one's reliance on those environments (Lawton and Nahemow, 1973) and raise challenges, such as maintaining social contact and routines in a confined space. Hence, functioning and disability after a stroke should not be understood as a feature of the individual but rather as an outcome of an interaction between the person with complex health conditions and the environment (Meijering et al., 2016; Fougeyrollas, 1995; Schneidert et al., 2003).

The environment encompasses several dimensions (e.g., physical, social and cultural) and includes the individual's whole context, such as the home, neighbourhood, and workplace, which can support or limit a person's participation in daily activities (Kielhofner, 2008). Poor housing conditions have been associated with an increased risk of depression before (Evans, 2003) and during (Amerio et al., 2020) the COVID-19 era. Many older people in Sweden live in homes with environmental barriers (Iwarsson and Wilson, 2006), which may have affected their independence and health under the COVID-19 pandemic. The conceptualization of a home in rehabilitation medicine is often objective, the home is viewed as a physical space/structure, and home evaluations are essential for discharge planning from inpatient to home settings (Douglas et al., 2017; Steultjens et al., 2013). Other authors have described the home as a place where people feel they belong related to their identity (Chaudhury and Oswald, 2019; Erikson et al., 2010; Nanninga et al., 2015). Furthermore, the home and the immediate surroundings can be familiar and meaningful places related to a person's sense of self and, thus, support or increase a person's well-being and participation in everyday life (Nanninga et al., 2018; Erikson et al., 2010).

In contrast to a house or a building (space), a home is a place filled with meaning and personal experiences (Rowles and Watkins, 2003). Over time, through daily use and social interactions, the home becomes an important part of a person's identity (Rowles and Bernard, 2013), which may be especially true for persons who experienced a stroke since the home is likely the place where they spend most of their time. Thus, the importance of understanding people's interactions with their environments and how these experiences develop over time and during periods with less freedom has been increasingly acknowledged in the literature. The stay-at-home recommendations imposed due to the COVID-19 pandemic have possibly further confined persons with a stroke to their homes and immediate surroundings. Hence, exploring experiences of interactions with the environment under stay-at-home recommendations could provide an opportunity to obtain a deeper understanding of such interactions and development over time.

In the present study, we explored how people recovered at home after a stroke experience and managed their everyday lives during the COVID-19 pandemic, with a specific focus on the environment. Thus, we contribute to an understanding of how individuals who are in an already vulnerable life situation experience being even more confined to home.

1.1. Aim

The aim of this study was to explore how people who recover after a stroke experience their everyday lives in their homes and close surroundings under COVID-19 pandemic recommendations.

2. Method

2.1. Study design

A qualitative, explorative design was chosen to describe how people with stroke experience and manage their everyday lives in the home and close surroundings under COVID-19 pandemic recommendations. The reporting follows the Consolidated Criteria for Reporting Qualitative Research (COREQ) (Tong et al., 2007) guidelines concerning reporting qualitative research. The data included transcripts of semistructured interviews.

2.2. Context

This study was conducted in the summer of 2020. COVID-19 reached Sweden in January, and in the beginning of March, the Public Health Agency of Sweden announced that the virus was spreading in the community. At this time, the World Health Organization (WHO) announced that COVID-19 was a global pandemic. Due to the lack of medical treatments and vaccines, governments had to rely on public health measures to control the spread of the virus. People aged >70 years and those with medical health conditions (e.g., stroke) were identified early as risk groups for whom public health measures should be more restrictive than the rest of the population.

The public health authority recommended that people belonging to risk groups should limit all social contact, including avoiding the use of public transportation and visits to shops and public spaces, and that they should not travel further from home than 2 h by car. In addition, restrictions for the general population were enforced in April, allowing only 50 persons at public events. When used in this study, the term COVID-19 recommendations refers to staying at home and having limited social contacts. Sweden did not have laws enforced or a complete lockdown as was the case in many other European countries.

At the time of the interview, the COVID-19 recommendations for persons belonging to risk groups had been implemented for approximately three months; it was summer, and the number of hospitalized persons due to COVID-19 was decreasing. Hence, the second wave of the pandemic had not yet occurred, and there was hope that the pandemic would soon dwindle.

2.3. Participants and recruitment

The participants were recruited among patients included in the Rehabilitation and Architecture (REARCH) study (Kylèn et al., 2019). The initial inclusion criteria entailed that the participants had a history of a mild to moderate stroke according to the Barthel Index (Govan et al.,

2009), had been discharged to their homes directly from the stroke unit to receive continued rehabilitation from a rehabilitation team, and were able to communicate and answer questions. No new assessment with the Barthel Index of dependence in personal activities of daily living was conducted at the time of this study.

From the REARCH study sample (N = 34), a subsample of fourteen people was chosen to represent a variation in their civil status, type of housing, type of close surroundings and degree of disability. Potential participants were contacted, informed about the present study aim and had the opportunity to ask questions. All agreed to participate and provided oral informed consent before an interview was scheduled.

Ethical approval was received from the Swedish Ethical Review Authority 2020–03580.

2.4. Semistructured interviews

A semistructured interview guide was developed by the authors to address experiences of living with the COVID-19 recommendations in the aftermath of a recent stroke. The interview guide included questions related to the experiences of persons with stroke in their everyday lives. The interviews started with an open question asking the respondents to describe a day in their present everyday lives. The participants were asked to describe a day in as much detail as possible, including what they did and where, such as in the home and close surroundings, and relate the present situation to that after stroke but before the COVID-19 recommendations. To prompt reflections upon plausible changes in everyday habits after stroke and the contemporary COVID-19 recommendations, the respondents were asked how many times during the past four weeks they had been outdoors or in the close surroundings or had made longer excursions outside the municipality of residency. The participants were further asked to reflect upon their everyday habits, whether there was a place in the home or close surroundings of particular importance to them and the significance of that place.

The interview guide was tested in two pilot interviews, discussed among the researchers, and refined before the data collection.

The interviews were conducted between May 28 and June 10 via video (Zoom or Facetime) or telephone by AWW, ME, MK, and LvK and were 20–60 min long. Thus, all co-authors (PhD) were involved in the data collection and had previous experience of conducting qualitative interviews. The length of the interview depended on the informant's narratives; on average, the interviews lasted approximately 42 min. The interviews were audio recorded and transcribed verbatim.

2.5. Analysis

The analysis of the qualitative data was inductive. Considering the limited knowledge regarding persons with stroke and their experiences of the COVID-19 situation, we explored how persons managed everyday life and how they found and used their personal resources to manage the situation at home and in their close surroundings. The transcripts were analysed by a thematic analysis as described by Braun and Clarke (Braun and Clarke, 2006). The transcripts were read several times, coded by AWW and LvK and then reviewed by all authors. Then, patterns of codes with similar content were sought, resulting in three themes. These themes were at the semantic level (i.e., describing the content of the dataset). The coding process was performed through visual representations using mind mapping, which was subsequently revised to compose a thematic map of the analysis. The themes were constantly checked in relation to the coded extracts and the entire dataset in a recursive (back-and-forth) process. The analysis was performed by all authors, and the findings were discussed until a consensus was reached.

3. Results

3.1. Participants

The 14 participants (7 women and 7 men) were aged 61–91 years and lived in southern Sweden. All participants lived in ordinary types of housing (houses, n = 9, apartments, n = 4, and senior housing, n = 1). Half of the participants were cohabiting, and an equal number lived in urban (n = 6) and suburban (n = 6) areas. Two participants lived in rural areas. Thirteen participants had a stroke in the second half of 2019, and one participant had a stroke in January 2020. Hence, it is likely that the participants were still recovering and adapting to life after stroke in light of the coronavirus pandemic (see Table 1).

3.2. Results of the analysis

We identified and constructed the following three intertwined themes from the data: i) places within and out of reach, ii) upholding activities–strategies and structures, and iii) adapting to new circumstances. The themes highlight how the participants reoriented in the new situation and their experiences of place.

3.2.1. Places within and out of reach

The participants experienced different places as within and out of reach and described how these places became increasingly important during the pandemic. While recovering from stroke during the coronavirus pandemic, the home was experienced as a meaningful and supportive place for most participants, but for some, it was experienced more as an empty space. Although the participants' experiences varied, the data showed that both the physical and social environment within reach and out of reach created structure and was important for maintaining activities.

The places within reach were predominantly described to be supportive in the current situation. Some participants (Andrew, Jan, Lena, and Ingrid) mentioned the entire home environment as important, while others mentioned a stronger connection of attachment to a specific room, such as the kitchen (Berit) or a large room (Ann), or a particular piece of furniture, such as a couch (Chris). Thus, in the process of reflecting upon the past and present, these places and objects inside the home were described as emotionally important.

Other places of particular importance in the home and close surroundings mentioned by the participants were the greenhouse (Berit)

Table 1
Demographics of the participants.

Pseudonyms	Age	Sex	Civil status	Type of housing	Geographical area
Berit	69	Woman	Cohabiting	House	Rural area
Jan	80	Man	Single living	House	Sub urban
Oskar	75	Man	Cohabiting	House	Urban
Lena	78	Woman	Single living	House	Sub urban
Maria	66	Woman	Single living	Apartment	Sub urban
Ingrid	91	Woman	Single living	Apartment	Urban
Zoe	77	Woman	Cohabiting	House	Sub urban
Simon	80	Man	Cohabiting	House	Urban
Marianne	73	Woman	Single living	Apartment	Urban
Hans	69	Man	Cohabiting	House	Sub urban
Shane	69	Man	Single living	House	Rural area
Andrew	61	Man	Cohabiting	House	Sub urban
Ann	81	Woman	Single living	Senior housing	Urban
Chris	72	Man	Cohabiting	Apartment	Urban

and terrace (Hans), where the boundary between inside and outside appeared to be diminished as follows:

"We sit there every day; we started in March sometime … yes, since April, we have been there every day" (Hans)

Several participants described increased attachment to the garden (Hans, Shane, and Jan) and the greenhouse (Oskar) and spent more time in these places during the pandemic as follows:

"I have used it more now" (Shane)

Gardens, greenhouses and the surrounding scenery, such as nature conservation areas, a cemetery close bye, and parks, were important and common walking destinations.

For those living in apartment blocks in the city with no access to a garden, having a balcony could be essential for reaching out and experiencing a sense of belonging. Being on a balcony allowed what was occurring outside in the street to feel within reach and appeared to supply the positive experience of being a part of everyday life in society. For example, one participant expressed the following:

"They (students) all run their bikes – very nice with the view, and it's close to everything, and in the backyard, where the garden is, you sometimes see people sitting out there" (Ann)

While most participants experienced being supported by their home environments and close surroundings, there were also examples of less supportive environments. Two participants, Marianne and Chris, both relocated and struggled to various degrees to establish a sense of being in place in their new homes. Marianne moved from a house where she lived for a long time that was a meaningful place filled with joyful memories. After the stroke, she wanted to relocate, thinking that a new smaller place (apartment) would be easier for her to manage. At the time of the interview, she recently moved into her new home, but she expressed that she regretted the move. "It went too fast", she says. Due to the pandemic, she was unable to visit the apartment prior to the move. Due to the transition, she no longer felt at home; the physical environment contained more barriers, and things she had the habit of doing were out of reach. Due to the stairs, uneven surfaces outside her home and hilly location, she was restricted in what she was able to do. For example, she could not enter the storage space as follows:

"Yes, I have storage, but I haven't even looked at it once because there are stairs down. Well, it's down in a basement" (Marianne)

The house and the close surroundings were experienced as unsafe spaces rather than a home. She struggled with daily activities, such as taking the garbage out and carrying her shopping goods from the parking lot. She was unhappy and wanted to move again.

"I don't feel comfortable (in the new home and neighbourhood); so, I'm looking for another place to live […] I will stay here only until I find one (apartment)" (Marianne)

Additionally, related to relocation, Chris moved from a house to an apartment 10 years prior, and he described how his desire for a garden was enhanced during the coronavirus recommendations. He expressed that he had become much more passive when not having a garden to tend to and spend time in. Gardening was out of reach, and currently, he found himself very inactive and spent most of his time on the couch watching TV. There was a feeling of loss and a feeling that his well-being would increase if there was more to do at home as follows:

"You know when you have lived in a house before you had things to do, there's something missing" (Chris)

The participants had different opportunities to be out in their gardens and close surroundings. The places that the participants had within their reach and out of their reach were related to how they lived and how easy it was for them to access these environments.

Several participants had more than one house and close surroundings. For some, a summer house that was previously a place of particular importance (Ingrid and Simon) became out of reach after stroke as it was no longer possible to enter the house due to environmental barriers (i.e., not able to walk on the stairs to get in and out) (Simon).

Socializing with family and friends was physically within reach for several participants, but for some participants, it was physically out of reach, such as due to a daughter living abroad. Even if places, such as the gym, or places to gather with friends were physically within reach, they were out of reach due to the coronavirus recommendations, which were experienced as devastating as follows:

"Yes, well this is so terrible, …I do not see anyone, except my partner" (Ann)

3.2.2. Upholding activities–strategies and structures

In light of the coronavirus pandemic, the participants discussed the importance of upholding their previous activities, even if some perceived such activities as boring. Most participants took charge over their lives and emphasized the importance of daily physical activities and being outdoors even if such activities were limited to the balcony or the immediate area outside the house. Some participants explained that they habitually got up at a certain time to have breakfast even though there was no need to do so as this gave structure to the day, which helped them maintain everyday normality despite new habits, such as late-night TV watching.

In terms of activities outside the home, several participants described being outdoors every day and walking up to five km (Hans, Shane, Jan, Zoe, Simon, Lena, and Ann) or riding their bikes (Berit and Hans). The other participants only left their home a few times a week (Chris), and one participant depended on another person who visited three times per week (Maria). Another participant was beyond his close surroundings once during the past four weeks (Andrew), and one person had not been out in the immediate area at all—only on the balcony and in a car with a relative (Ingrid).

"It's a very monotonous day, you can say; you get up at seven o'clock, maybe even half past seven–and then …. yes, fix breakfast, and then, you turn on the TV maybe and watch, and then, there is after all very much on TV; so, unfortunately, it can be the case that you discover that all of a sudden, it is eleven o'clock, maybe half past ten. Yes, it is a very monotonous life at the moment because you don't have things to do" (Chris)

Most participants described their everyday lives in the present, and they planned in shorter time frames, i.e., they did not plan for more than the immediate future, i.e., days or a week.

At the time of the interviews, travel was recommended not to exceed 2 h from home by car. Several participants missed making shorter trips to summer houses and longer trips abroad for vacation or to visit family members (Ann).

For some participants, their interests were passions that were embedded in their lives and a part of their lifestyles. Birdwatching in the national park helped one participant maintain his regular everyday life. Another participant (Shane) was an expert in the plants that could be cultivated in his garden. The garden was an important and familiar place to him, and the interest could be continued despite the stroke and coronavirus recommendations. While holding a social activity to offer advertised garden visits to the public was no longer possible for Shane, he quickly adapted and created a website to exhibit his plants to the public and wrote articles, thereby gaining new national and international contacts as follows:

"Right now, I'm working on an article about a species that grows in China, which we are investigating, me and another guy, so that keeps me busy." (Shane)

3.2.3. Adapting to new circumstances

In the participants' narratives, it was evident that they acquired some habits in adjusting to the new circumstances (aftermath) after stroke, e.g., how to move around in the home and in the neighbourhood. At the time of the interview, the participants had been or were in the process of adapting to the new situation after a stroke, indicating that they were already used to a more limited capacity in performing meaningful activities. In addition, the participants revealed that because they shared the coronavirus situation with others in society, it was easier for them to adapt.

In some cases, the participants were beginning to reinitiate some of their paused activities, such as picking up grandchildren from school, which was experienced as an expanded possibility despite the recommendations. Some participants found new ways to maintain everyday social contacts. Picking up the morning paper and delivering it to one's mother-in-law instead of visiting each other inside the house is one example. Some previous activities could no longer be maintained in person due to the recommendations (e.g., going shopping, seeing friends or playing cards). Instead, the participants took control over the situation and learned how to use digital meetings to shop or stay in contact as follows:

> "*I go online to two different stores, where I check items I want to buy, and then, you just press time and date, and then, they come home and deliver it" (Maria)*

Agency in terms of reorientation and problem solving was described as positive by many as follows:

> *"This is a new world that we have practised many times now with my friends; we see each other on Facetime" (Berit)*

One participant reported that the group of friends whom she used to play cards with found no pleasure in playing cards digitally, and the group paused card playing. The group solved this situation by communicating on a daily basis by e-mail or telephone instead. For them, there were no alternative ways to participate in the activity, which they found required their physical presence.

However, some participants found it difficult to adapt to the age-related recommendations and expressed feelings of being patronized and stigmatized as follows:

> *"You feel a bit like a prisoner … I was about to say an inferior person, but I'm a bit active in different constellations ….and I'm excluded from that; so, it was like … you were a pariah" (Chris)*

4. Discussion

This study explored how people living with the aftermath of a stroke experienced their everyday lives in their homes and close surroundings during the COVID-19 pandemic. The aim of our study extends beyond a medical focus on the situations of persons with stroke rehabilitated at home. We strived to use an environmental lens and capture their situations in real-life settings. Listening to their voices and shared experiences is important because it allows a deeper understanding of living in confinement and adapting to the consequences of a stroke. The unique experiences of persons with stroke during this global pandemic are largely invisible in media reports and the scientific literature.

One could expect that persons living with functional decline and in a new situation could coincide with lower agency (Oswald and Wahl, 2005). However, this was not the case in our study; overall, the participants' experiences reflected flexibility and creativity to take control and be able to adapt to the COVID-19 situation. Hence, to maintain an everyday normality, they used various strategies to resist social, environmental, and health challenges. While returning home after a stroke is known to be a time of adjustment to a changed life situation (Wottrich et al., 2012), the participants in the present study seemed to make use of their previous experience, which may have better prepared them to adapt to the new way of life during the pandemic. Similarly, a study focusing on residents in a care home facility showed how life-changing events from earlier in life influenced the way residents coped with the changes in daily life due to the COVID-19 pandemic (Leontowitsch et al., 2021).

An important finding was that places within reach, such as parks, gardens, and other local green areas, were important for maintaining a sense of everyday normality and managing everyday life despite the pandemic. Proximity to places in the neighbourhood enabled the participants to meet with friends and family; however, the persons who did not have direct access to nature in terms of gardens or parks seemed to benefit from having contact with the outdoors from a balcony. These results are consistent with emerging global evidence showing the importance of access to local parks and the natural environment for health and well-being (Levinger et al., 2021; Wood et al., 2017). Access to parks and green areas is essential for individuals' health and well-being and has been proposed to lead to healthier populations (White et al., 2019; Douglas et al., 2017; Shanahan et al., 2016). During the pandemic, research has shown that people have visited public parks more than before to meet others and combat social isolation (Volenec et al., 2021). Connection to nature has become strongly desired.

Thus, it is essential to create accessible neighbourhoods, parks, and green areas to promote health and well-being for all groups in the population. Concerning the pandemic situation, local policymakers, urban planners, and governments should consider what is appropriate and essential for the general population's health and how to best maintain physical distance in public spaces. Other studies have highlighted differences in access to parks and green spaces among underprivileged and vulnerable people during the pandemic (Slater et al., 2020; Astell-Burt and Feng, 2021; Burnett et al., 2021). However, it is also essential to understand that the concept of mobility can be considered in terms of the connection of meaningful places to individuals rather than in terms of movements from point A to point B (Nanninga et al., 2018). One participant in this study explained the meaning she derived from sitting on the balcony and watching other people move by. For her, watching the movement in the city offered a sense of belonging and made her feel like she was a part of society even though she was not physically present in the movement.

Our study shows that a place can have an increased significance for people in a recovery phase after a stroke. However, while most participants were supported by places within reach, two participants experienced less supportive environments. In Marianne's case, the limitations of the coronavirus pandemic may have emphasized her experiences of her home as a space rather than a place. Nevertheless, it is conceivable that other circumstances also contributed to her negative experiences of her home. She may have experienced moving after a stroke as involuntary (anxiety or insecurity due to impaired function). Under such circumstances, a disruption of the long-established relationship with a place (i.e., home) can make relocation problematic (Rowles and Watkins, 2003). In addition, Chris moved ten years prior but was still struggling. The feelings of loss regarding the garden in his old home intensified during the restriction period. These examples highlight that being present through familiarity, identity, and place connection can positively affect individuals and that one's home is not always fully experienced as a place. Marianne moved to an apartment to help her recover from a stroke and thought this new home would be a place to grow old in, but instead, she found herself in an unfavourable situation. She saw the home as a space, and many places were currently out of reach. Our results suggest that after relocation, a person may feel "stuck in place" (Tong et al., 2007), which may lead to reduced well-being.

The importance of a neighbourhood and home as significant places has long been discussed (Sturge et al., 2021; Low and Altman, 1992). It has been argued that places play a crucial role in life and identity, providing an individual with a sense of belonging and a means of understanding the world (Rowles and Watkins, 2003). In addition, neighbourhoods, as places, are crucial for health, and research has

consistently highlighted the link between poor-quality housing and physical and mental health issues (Evans, 2003; Lomas et al., 2021). We could observe that the home was important for upholding structure and daily activities and that having a garden or places in the neighbourhood within reach influenced the way the participants managed their lives during the COVID-19 pandemic. Many participants emphasized the importance of being outside every day, and most participants engaged in daily walks or rode their bikes. Physical activity and mobility are important for recovery after a stroke (Oberlin et al., 2017), and community-living persons with stroke have been reported to perform below the recommended threshold of daily physical activity for people with chronic illness (Field et al., 2013). The balance between protecting vulnerable people from infection and encouraging them to maintain physical activity and combat isolation is delicate. Regular exercise is essential for preventing muscle loss, falls, and fall-related injuries. The closure of sports facilities and limited access to outdoor spaces and unhindered movement might reduce opportunities for physical activity and exercise. Prolonged social isolation can also affect mental health, and decreased social networks, isolation, and loneliness can exacerbate generalized anxiety and major depressive disorders among the older population (Wong et al., 2020). Additionally, due to the recommendations, some participants expressed frustration with not being able to be spontaneous, which could be explained by their experience of loss of their degree of freedom; for example, they may be unable to take advantage of opportunities when offered. Adding to the frustration, the inability to be spontaneous may also be stressful for this group as persons recovering from a stroke often suffer from fatigue and/or have cognitive impairments and, therefore, need to adapt activities to their daily conditions. Thus, as their daily functioning varies, the inability to perform activities based on how persons with stroke feel that day may restrict their daily activities and possibilities for social interactions more than among the general older population.

Most participants expressed that they adapted to the new situation and were motivated to participate in social and leisure activities despite the COVID-19 situation. These results should be understood in light of the fact that the participants were already in an adjustment process after their stroke. Before the stay-at-home recommendations, the participants already had limited possibilities to be active and visit all the places that they might have wished due to their stroke. They had already been challenged to develop new habits and routines; thus, the transition to a more limited life due to the recommendations imposed by the public health authorities may not have been as demanding as it might have been for their healthy peers. Nevertheless, another Swedish study conducted at approximately the same time showed that older adults in the general population were reluctant to complain about the situation as they felt that it could have been much worse (Fristedt et al., 2021). Future research is needed to understand the long-term effects of living in confinement among people with stroke and how stroke rehabilitation staff experienced their work during the COVID-19 pandemic.

We collected data approximately three months after the start of the stay-at-home recommendations were imposed. It was expected that this would have been a stressful moment for the participants as there were no clear examples or expectations available of what the situation would be like. However, the results showed that overall, the participants were content with their situation. They expressed that they were grateful that they could do so much despite both the stroke and COVID-19 recommendations. The participants also expressed that they felt connected to others in society as everyone had to live under the same restrictions. Consequently, when entire populations had to follow social distancing regulations, many people with disabilities experienced relief and a sense of shared experiences and solidarity (Goggin and Ellis, 2020). This finding provides important insight as society can adopt this situation as a lesson and support people by connecting them to people in the same situations.

4.1. Strengths and limitations

The study's main strength is the use of interviews with persons who recovered from a stroke in their homes, which allowed us to obtain a more comprehensive understanding of their situations during the COVID-19 pandemic. We could easily reach the persons since they were included in one of our ongoing studies investigating rehabilitation after a stroke at home before the outbreak. Since we knew the participants from previous research activities, we could invite participants who we knew lived in a variety of environments and family constellations, which generated rich data and provided us with the unique aspects of each person's experience.

The participants varied in age and were still recovering and adapting to life after stroke. The elapsed time since stroke varied among the participants, which may play a role in their experiences and data interpretation. However, how daily life and functioning are affected among persons with mild to moderate stroke is known to vary. The participants lived in urban, suburban, and rural areas; some participants lived in their current home for a long time, while other participants had recently moved, which added to the richness of the experiences captured. While beyond the scope of our study, it would be interesting to explore how these variations (e.g., age and household composition) affect the process of recovering from a stroke or the perceived vulnerability to pandemic recommendations in future research. Additionally, none of the participants in our study suffered from a severe stroke or needed help with activities of daily living, which should be considered when generalizing our findings.

The interviews were conducted during the first wave of the coronavirus pandemic, i.e., when the stay-at-home recommendations had been implemented for approximately three months. At this time, it was summer, and the number of hospitalized persons due to COVID-19 was decreasing. Thus, this was a more positive situation than in the very beginning of the pandemic, which also needs to be considered when interpreting the findings. In addition, Sweden had less strict measures than many other countries, and thus, future research in other countries and contexts is warranted.

We conducted the interviews remotely by phone or video call, which we anticipated would be a disadvantage. Although a limitation because we consider face-to-face interviews in the persons' homes a better alternative, the interviews were easy to arrange, and the participants provided rich descriptions of their everyday lives.

Worthwhile insights were obtained that could be helpful for not only future potential lockdowns but also understanding the everyday lives of people with stroke rehabilitated at home.

5. Conclusions

This interview study provides insight into the experiences of people living with the aftermath of a stroke during the first wave of the COVID-19 pandemic and stay-at-home recommendations. Places within reach became significant for opportunities to maintain both activities and structure in daily life. The participants seemed to adapt to the situation because they were already in a restrictive situation due to their need for rehabilitation after stroke; thus, they could draw upon their previous experiences. In addition, the participants felt that they shared the recommendations with all other people in society, which seemed to ease their situations. The opportunity to stay connected to family and a daily routine could be facilitated through access to nature and spaces in the close surroundings. We conclude that research focusing on the effects of the COVID-19 stay-at-home recommendations on people with stroke is worthwhile and important for informing the development of interventions that consider home and neighbourhood aspects to sustain their health and support their rehabilitation during and after the pandemic.

Declaration of competing interest

None.

Appendix A. Supplementary data

Supplementary data to this article can be found online at https://doi.org/10.1016/j.healthplace.2022.102852.

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